

Claims

1. An anti-twist device (10) for a sealing cap (11), mountable or mounted on a fixed connecting piece (12) of a container (13), in particular a motor vehicle radiator, which cap has having an external cap part (14) with a grip element (16) and with a sealing element (17) that is connectable to a counterpart sealing element (19) of the connecting piece (12), relative to which sealing element the grip element is kept relatively rotatable, and the cap also has an internal cap part (21) with a valve assembly embodied preferably as an excess/negative pressure combination, and in the external cap part (14) an anti-twist stop (30) acts between the grip element (16) and the sealing element (17), characterized in that the anti-twist stop (30) is actuatable by means of a drive (45) triggered by the operating data in the container (13), the drive being accommodated inside the container (13) near the external cap part (14).

2. The anti-twist device as defined by claim 1, characterized in that the drive (45) has a drive part (47), disposed on a circumferential region of a container wall (46) adjacent to the connecting piece (12).

3. The anti-twist device as defined by claim 1, characterized in that the drive (45) is formed by two or more drive parts (47), distributed preferably uniformly over the circumference of a container wall (46) adjacent to the connecting piece (12).

4. The anti-twist device as defined by claim 3, characterized in that each of two drive parts (47) is disposed, held separately, inside the container (3) and tangentially below the counterpart sealing element (19) of the connecting piece (12).

5. The anti-twist device as defined by claim 4, characterized in that each drive part (47) is received in a housing (48) that is held suspended from the container wall (46).

6. The anti-twist device as defined by claim 5, characterized in that the housing (48) is held in pressure-tight fashion in a recess (61) in the container wall (46).

7. The anti-twist device as defined by claim 5 or 6, characterized in that the housing (48) is composed of a hood part (56), protruding from the container wall (46), and a basket part (58), whose bottom (49) is provided with an opening (51).

8. The anti-twist device as defined by claim 7, characterized in that the hood part (56) is provided with an axial leadthrough (57), which penetrates the container wall (46) and is held in it in pressure-tight fashion.

9. The anti-twist device as defined by claim 7, characterized in that the hood part (56) and the basket part (58) are joined, locking over and in one another.

10. The anti-twist device as defined by at least one of the foregoing claims, characterized in that each drive part (47) has a vertically oriented actuation bolt (53), which, facing toward the anti-twist stop (30), penetrates the container wall (46).

11. The anti-twist device as defined by claim 10, characterized in that the actuation bolt (53), on its end remote from the anti-twist stop (30), is covered by a diaphragm (59), which is fastened tightly between the hood part (56) and the basket part (58).

12. The anti-twist device as defined by at least one of the foregoing claims 2 through 11, characterized in that the drive part (47) is pressure-controlled, and its actuation bolt (53) is spring-loaded in the opposite direction.

13. The anti-twist device as defined by at least one of the foregoing claims, characterized in that the anti-twist stop (30) has a horizontally disposed and axially movable coupling unit (31).

14. The anti-twist device as defined by claim 13, characterized in that the coupling unit has a number of separate coupling elements (31), corresponding to the number of drive parts (47), which coupling elements are each diametrically opposite the drive part or drive parts (47).

15. The anti-twist device as defined by claim 14, characterized in that the coupling element (31) is joined in a manner fixed against relative motion to an axial bolt (36), which can be acted upon by the actuation bolt (53) counter to the action of a compression spring (39).

16. The anti-twist device as defined by claim 14 or 15, characterized in that the coupling element (31) is disposed in a manner fixed against relative rotation in the sealing element (17) of the external cap part (14) and is provided radially on the outside with a set of teeth (43) which upon axial motion of the coupling element (31) can be brought into and out of engagement in a manner fixed against relative rotation with a corresponding set of teeth (44) in the grip element (16) of the external cap part (14).

17. A unit comprising a container (13) having a connecting piece (12), or comprising a container connecting piece (12) and a sealing cap (11), having an anti-twist device (10) as defined by claim 1 and optionally at least one of the ensuing claims 2 through 16.